

1. A weightlifting apparatus for use in conjunction with an exercise weight of the type that has a central aperture that permits the weight to be secured to various weightlifting appliances, comprising:

a bar having a first and a second opposing end;

5 means for securing the weight adjacent the first end of the bar; and

means, situated adjacent the second end of the bar for attachment of a gripping plate.

2. The weightlifting apparatus in accordance with claim 1, wherein the means for securing the weight comprises an end cap having an outer dimension larger than that of the bar, and clamping means that clamps to the bar for securing the weight between the end cap and the clamping means.

3. The weightlifting apparatus in accordance with claim 2, wherein the clamping means comprises one of the following: a hinged clamp with a wing nut that draws the hinged clamp into engagement with the bar, a split shaft collar secured by a screw, and a collar that is secured to the bar using a set screw.

4. The weightlifting apparatus in accordance with claim 1, wherein the means for attachment comprises one of a hook and an eye, wherein the other of the hook and eye is attached to the gripping plate.

5. The weightlifting apparatus in accordance with claim 1, wherein the means for attachment comprises an aperture in the bar near the second end for receiving a pin that attaches to the gripping plate.

6. The weightlifting apparatus in accordance with claim 1, further comprising a sleeve that slides over the bar and forms a handle near the second end.

7. The weightlifting apparatus in accordance with claim 1, further comprising a gripping plate attached to the means for attachment.

5 8. The weightlifting apparatus in accordance with claim 7, wherein the gripping plate is shaped in one of the following shapes: disk shaped, elliptical shaped, oval shaped, irregularly shaped, variable diameter shaped, multi-diameter shaped, hand contour shaped and gripping contour shaped.

9. The exercise apparatus in accordance with claim 7, wherein the gripping plate has a perimeter that varies in diameter between three diameters - a narrower diameter, an intermediate diameter and a wider diameter.

10 10. The exercise apparatus in accordance with claim 9, wherein the outer diameter drops abruptly at a first point on the perimeter the wider diameter to the narrower diameter and then gradually increases diameter until the wider diameter is reached about 160 degrees from area first point; and wherein at a second point perimeter drops abruptly to beyond the narrower diameter then curves
15 outward to the narrower diameter, and then reaches the narrower diameter at which point the perimeter gradually increases in diameter until it reaches the wider diameter at the first point.

11. The exercise apparatus in accordance with claim 9, wherein the narrower diameter, the intermediate diameter and the wider diameter are approximately
20 5.15 inches, 5.62 inches and 6.10 inches respectively from a central point.

12. The exercise apparatus in accordance with claim 9, wherein the narrower diameter, the intermediate diameter and the wider diameter are approximately 4.43 inches, 4.85 inches and 5.25 inches respectively from a central point.

13. The exercise apparatus in accordance with claim 7, wherein the gripping plate comprises a variable diameter gripping plate and has first and second opposed offset spiral segments defining a portion of a periphery thereof.

5 14. The weightlifting apparatus in accordance with claim 1, wherein the bar comprises a two part bar with a weight carrying part and a handle part, connected together by a threaded engagement.

15. The weightlifting apparatus in accordance with claim 1, wherein the means for attachment provides pivotal attachment.

16. A weightlifting apparatus for use in conjunction with an exercise weight of the type that has a central aperture that permits the weight to be secured to various weightlifting appliances, comprising:

a bar having a first and a second opposing end;

5 an end cap having an outer dimension larger than that of the bar adjacent the bar at the first end;

means for attaching the weight to the bar adjacent the end cap;

a gripping plate; and

10 means, situated adjacent the second end of the bar for pivotal attachment of the gripping plate.

17. The weightlifting apparatus in accordance with claim 16, wherein the attaching means comprises one of the following: a hinged clamp with a wing nut that draws the hinged clamp into engagement with the bar, a split shaft collar secured by a screw, and a collar that is secured to the bar using a set screw.

15 18. The weightlifting apparatus in accordance with claim 16, wherein the means for pivotal attachment comprises one of a hook and an eye, wherein the other of the hook and eye is attached to the gripping plate.

20 19. The weightlifting apparatus in accordance with claim 16, wherein the means for pivotal attachment comprises an aperture in the bar near the second end for receiving a pin that pivotally attaches to the gripping plate.

20. The weightlifting apparatus in accordance with claim 16, further comprising a sleeve that slides over the bar and forms a handle near the second end.

21. The weightlifting apparatus in accordance with claim 16, wherein the gripping plate is shaped in one of the following shapes: disk shaped, elliptical shaped, oval shaped, irregularly shaped, variable diameter shaped, multi-diameter shaped, hand contour shaped and gripping contour shaped.

5 22. The exercise apparatus in accordance with claim 16, wherein the gripping plate has a perimeter that varies in diameter between three diameters - a narrower diameter, an intermediate diameter and a wider diameter.

10 23. The exercise apparatus in accordance with claim 22, wherein the outer diameter drops abruptly at a first point on the perimeter the wider diameter to the narrower diameter and then gradually increases diameter until the wider diameter is reached about 160 degrees from area first point; and wherein at a second point perimeter drops abruptly to beyond the narrower diameter then curves outward to the narrower diameter, and then reaches the narrower diameter at which point the perimeter gradually increases in diameter until it reaches the wider diameter at the first point.

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24. The exercise apparatus in accordance with claim 22, wherein the narrower diameter, the intermediate diameter and the wider diameter are approximately 5.15 inches, 5.62 inches and 6.10 inches respectively from a central point.

20 25. The exercise apparatus in accordance with claim 22, wherein the narrower diameter, the intermediate diameter and the wider diameter are approximately 4.43 inches, 4.85 inches and 5.25 inches respectively from a central point.

26. The exercise apparatus in accordance with claim 16, wherein the gripping plate comprises a variable diameter gripping plate and has first and second opposed offset spiral segments defining a portion of a periphery thereof.

5 27. The weightlifting apparatus in accordance with claim 16, wherein the bar comprises a two part bar with a weight carrying part and a handle part, connected together by a threaded engagement.

28. A weightlifting apparatus; comprising:

a bar having a first and a second opposing end;

a weight having a central aperture dimensioned so that the bar can be passed through the aperture;

5 an end cap having an outer dimension larger than that of the bar and the aperture, the end cap being situated adjacent the first end of the bar;

wherein the bar passes through the central aperture and rests against the end cap;

a clamp that secures the weight to the bar adjacent the end cap;

10 a gripping plate having a clip attached thereto for attachment to the bar; and

an aperture through the bar adjacent the second end of the bar for pivotal attachment of the gripping plate using a pin passing through the clip.

15 29. The weightlifting apparatus in accordance with claim 28, wherein the gripping plate is shaped in one of the following shapes: disk shaped, elliptical shaped, oval shaped, irregularly shaped, variable diameter shaped, multi-diameter shaped, hand contour shaped and gripping contour shaped.

20 30. The exercise apparatus in accordance with claim 28, wherein the gripping plate comprises a variable diameter gripping plate and has first and second opposed offset spiral segments defining a portion of a periphery thereof.

31. The weightlifting apparatus in accordance with claim 28, further comprising a sleeve that slides over the bar and forms a handle near the second end.

32. The weightlifting apparatus in accordance with claim 28, wherein the bar comprises a two part bar with a weight carrying part and a handle part, connected together by a threaded engagement.

33. An exercise apparatus, comprising:
a gripping plate; and
a weight connected to the gripping plate so that a user can exercise the hand, fingers and arms by lifting the weight by the gripping plate.

5 34. The exercise apparatus in accordance with claim 33, wherein the weight is suspended from the gripping plate.

35. The exercise apparatus in accordance with claim 33, wherein the gripping plate comprises a variable diameter gripping plate.

10 36. The exercise apparatus in accordance with claim 33, wherein the gripping plate is shaped in one of the following shapes: disk shaped, elliptical shaped, oval shaped, irregularly shaped, variable diameter shaped, multi-diameter shaped, hand contour shaped and gripping contour shaped.

37. The exercise apparatus in accordance with claim 33, wherein the weight is suspended from the gripping plate using a pivotal suspension mechanism.

15 38. The exercise in accordance with claim 33, wherein the weight is suspended using a bar to attach the weight to the gripping plate.

39. The exercise apparatus in accordance with claim 33, wherein the gripping plate is made of a flexible material.

20 40. The exercise apparatus in accordance with claim 33, wherein the gripping plate incorporates a cavity, and wherein the weight resides within the cavity.

41. The exercise apparatus in accordance with claim 33, wherein the gripping plate has a perimeter that varies in diameter between three diameters - a narrower diameter, an intermediate diameter and a wider diameter.

5 42. The exercise apparatus in accordance with claim 41, wherein the outer diameter drops abruptly at a first point on the perimeter the wider diameter to the narrower diameter and then gradually increases diameter until the wider diameter is reached about 160 degrees from area first point; and wherein at a second point perimeter drops abruptly to beyond the narrower diameter then curves outward to the narrower diameter, and then reaches the narrower diameter at 10 which point the perimeter gradually increases in diameter until it reaches the wider diameter at the first point.

43. The exercise apparatus in accordance with claim 41, wherein the narrower diameter, the intermediate diameter and the wider diameter are approximately 5.15 inches, 5.62 inches and 6.10 inches respectively from a central point.

15 44. The exercise apparatus in accordance with claim 41, wherein the narrower diameter, the intermediate diameter and the wider diameter are approximately 4.43 inches, 4.85 inches and 5.25 inches respectively from a central point.

20 45. The exercise apparatus in accordance with claim 33, wherein the gripping plate comprises a variable diameter gripping plate and has first and second opposed offset spiral segments defining a portion of a periphery thereof.

46. An exercise apparatus, comprising:
a variable diameter gripping plate made of a flexible material that can be squeezed and flexed to carry out hand and finger exercises.
- 5 47. The exercise apparatus in accordance with claim 46, further comprising a weight connected to the gripping plate so that a user can exercise the hand, fingers and arms by lifting the weight by the gripping plate.
48. The exercise apparatus in accordance with claim 47, wherein the weight is suspended from the gripping plate.
- 10 49. The exercise apparatus in accordance with claim 47, wherein the weight is suspended from the gripping plate using a pivotal suspension mechanism.
50. The exercise apparatus in accordance with claim 46, wherein the gripping plate incorporates a cavity, and wherein a weight resides within the cavity.
- 15 51. The exercise apparatus in accordance with claim 46, wherein the gripping plate has a perimeter that varies in diameter between three diameters - a narrower diameter, an intermediate diameter and a wider diameter.